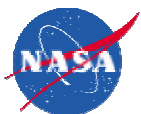


## Section 3

# Advocacy/ Partnerships



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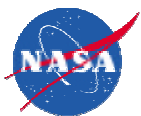
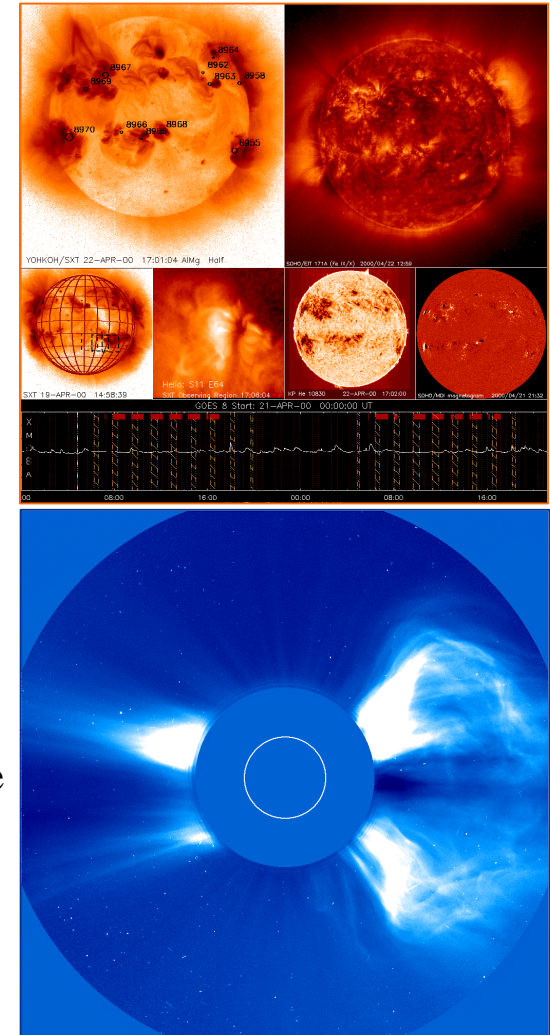
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## LWS - Why NASA?

NASA is uniquely positioned to lead the LWS initiative:

- LWS is a space science research and development (R&D) program and NASA is the only federal agency whose primary mission is space R&D.
- NASA has extensive experience in funding and managing a major national solar-terrestrial research and development program whose foundation is peer-reviewed scientific investigations carried out with scientists from the university, non-profit, governmental laboratory, and industrial communities.
- Data from research satellites of NASA and its international partners (ACE, SOHO, Yohkoh and soon, IMAGE) are routinely used for “space weather” purposes by operational agencies (e.g. NOAA), including the only real-time solar wind data providing 30 to 60 minute space weather warnings (ACE). The only backup/replacement for ACE is another NASA mission under development for launch in 2001, Triana.
- Many of the most powerful new tools for space weather forecasting have resulted from NASA programs, from imaging coronal mass ejections to detecting solar storm regions on the far side of the Sun.
- NASA and its international partners have developed nearly all of the currently operating solar-terrestrial research spacecraft.



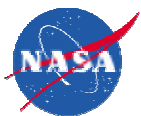
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## Advocacy/Partnerships

Several agencies already have space weather-focused programs, as itemized below:

- The National Oceanic and Atmospheric Administration (NOAA) currently monitors space weather events and is the primary source of such reports to military and civilian users. It also has a basic research capability directed toward enhancing predictive capability.
- U.S. Air Force (USAF) has a space weather group and provides information and predictions on space weather for military operations.
- Air Force Research Laboratory (AFRL) performs basic research in space weather and its effect on systems.
- Navy has a research program in space weather.
- The National Science Foundation (NSF) funds a broad range of basic research in space weather and solar-terrestrial effects.



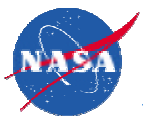
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## Advocacy / Partnerships (cont.)

The LWS program is developing partnerships with these and other federal agencies to augment existing capabilities and provide new systems. To this end, LWS will:

- Work with the partners to define national needs.
- Prototype new observing and data analysis techniques to enable development of advanced models and predictive capability. Useful technologies will be made available to other agencies for monitoring and predictive purposes.
- Make data from research spacecraft available for use by other agencies.
- Work with partners to develop a coherent national program in solar effects on space weather and climate.



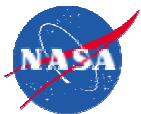
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## Program Evaluation

Space weather nowcast and forecast products are currently produced by NOAA and the USAF. As an essential element of the LWS program, representatives from these and other agencies will participate in the independent evaluation and review process mandated for new NASA programs (NPG 7120.5A). The evaluation process will be used to:

- Identify and update goals and priorities in the SEC programs and projects
- Assess and document the value of LWS efforts in terms of national needs
- Review and validate research and new space weather products
- Develop the process by which LWS results are made available to the citizens and agencies of the United States



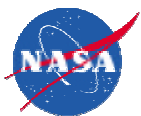
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## Major Program Meetings

Partnerships are being developed within NASA and with other agencies to define their priorities and stimulate synergism for space weather systems of the future. Some of the larger meetings held to date illustrate the importance given to developing these partnerships.

- |   |                     |
|---|---------------------|
| • NOAA Space Environment Center Visit by LWS Team       | November 9-10, 1999 |
| • NASA Headquarters LWS Inter-Agency Meeting            | January 11, 2000    |
| • SDO Preliminary Mission Definition Team Meeting       | January 24, 2000    |
| • LWS Measurement Requirements Workshop                 | February 9-10, 2000 |
| • RBM Preliminary Mission Definition Team Meeting       | March 9, 2000       |
| • IM Preliminary Mission Definition Team Meeting        | March 16, 2000      |
| • Chapman Space Weather Conference                      | March 20-24, 2000   |
| • AAS Goddard Memorial Symposium                        | March 29-30, 2000   |
| • Sentinels Preliminary Mission Definition Team Meeting | April 6, 2000       |
| • LWS Community Workshop                                | May 10-12, 2000     |



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